



Closed Loop Gas Capture

Ophelia 27 #1H

Q3 2023 Report

1. Introduction

NMOCD Order R-21747, Paragraph 16, requires quarterly project status updates from EOG Resources on the Ophelia 27 #1H (30-025-41114) Closed Loop Gas Capture (CLGC) well. The following document outlines the activities that have taken place since the previous update submitted June 9, 2023.

2. Project Activity Summary

EOG maintained consistent usage of the Ophelia 27 #1H CLGC system through the months of June and July. No injection occurred during August or September to-date, based on operational needs. Injection occurred on 10 days since the previous report period, with material volumes recorded for 6 days. Volume data (Table 1) is included in Section 3 of this report and an analysis of production uptime and flare prevention impacts is included in Section 4.

3. Injection Data

Table 1 summarizes the daily injection totals for the dates that injection took place during the report period. The frequency and lengths of the injection periods through July 19th are consistent with the previous report. After that date, automation complications resulted in aborted use of the system, which is indicated by the low injection volumes. That issue was rectified prior to the end of July.

No abnormal well behavior occurred during the report period. All casing pressures were within the specified ranges and intermediate casing pressure remained stable. Gas recovery was consistent. The well has 100% injection recovery as of the writing of this report.

4. Operations Review

During the report period, EOG's deployment of the Ophelia 27 #1H CLGC system prevented an estimated 568 MT CO_{2e} in flare emissions and allowed for the continued production of an estimated 1,947 BBL of oil, as broken down by month in Table 2.

Date	Injection Volume [MSCF]	Injection Time [hours]
06/09/2023	1,423	8.62
06/11/2023	1,769	15.34
06/12/2023	935	5.83
06/13/2023	344	4.30
06/14/2023	1,279	11.17
07/19/2023	989	6.15
07/25/2023	15	0.38
07/26/2023	5	0.12
07/27/2023	3	0.06
07/28/2023	49	0.36
Total	6,811	52.33

Table 1: Injection Volume Data for Report Period

Month	Est. Associated Oil Volume [BBL]	Est. Flare Emissions Avoided [MT CO ₂ e]
June	1,644	479
July	303	88
August	0	0
September (MTD)	0	0
Total	1,947	568

Table 2: Ophelia 27 #1H CLGC Associated Impact Data for Report Period

5. Conclusion

Since the previous report submitted June 9, 2023, EOG utilized the Ophelia 27 #1H for CLGC injection on 10 days, with material volumes recorded for 6 days. The CLGC system prevented an estimated 568 MT CO_{2e} in flare emissions and avoided the curtailment of an estimated 1,947 BBL of produced oil.

6. Contacts

Engineering

Ryan Yarger

Sr. Facilities Engineer

(432)-210-7842

Ryan_Yarger@EOGResources.com

Regulatory

Sarah Mitchell

Sr. Regulatory Manager

(432)-425-6637

Sarah_Mitchell@EOGResources.com